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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/884,908

06/21/2001

Yuji Mori

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4769

20457

7590

12/23/2004

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EXAMINER

MACCHIAROLO, PETER J

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/884,908

Applicant(s)

MORI ET AL.

Examiner

Peter J Macchiarolo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/05/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The reply filed on 01/05/2004 consists of remarks related to the prior rejection of claims in the previous Office Action. However, pending claims 1-3, 5, and 6 are not allowable as explained below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujita et al (USPN 5962962: “Fujita”).

3. Regarding claim 1, Fujita shows in figure 1, an organic electroluminescent display comprising: a transparent substrate (11), an organic light emitting layer (14) which is formed on a back surface side of the transparent substrate, electric current supply means (12, 16) which makes an electric current flow through the organic light emitting layer, a housing (18) which covers at least the organic light emitting layer and is sealed to the transparent substrate, and heat radiation material in a liquid form (20) which is filled in a space formed between the housing and the transparent substrate wherein water which is contained in the heat radiation material as an impurity amounts to not more than 100 ppm by weight ratio.¹

¹ Fujita, col. 6, ll. 27-30.

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4. Regarding claim 2, Fujita teaches the housing can be formed from a metal.²

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over previously cited Eguchi (USPN 4734338; "Eguchi") in view of Fujita.**

6. Regarding claim 1, Eguchi shows in figure 4, an organic electroluminescent display comprising: a transparent substrate (41), an organic light emitting layer (40) which is formed on a back surface side of the transparent substrate, electric current supply means (45 and 46) which makes an electric current flow through the organic light emitting layer, a housing (41) which covers at least the organic light emitting layer and is sealed to the transparent substrate, and heat radiation material in a liquid form (42) which is filled in a space formed between the housing and the transparent substrate.

7. Eguchi is silent to the amount of water which is contained in the heat radiation material as an impurity amounts to not more than 100 ppm by weight ratio.

8. However, Fujita teaches that when the heat radiation material has a water content of 10 ppm or less, the growth of dark spots can be better prevented.³

² Fujita, col. 7, ll. 49-55.

³ Fujita, col. 6, ll. 53-56.

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9. Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Eguchi with the heat radiation material having a water content of 10 ppm or less, so the growth of dark spots can be better prevented.

10. Regarding claim 3, Eguchi discloses the heat radiation material is silicone oil.

11. **Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita in view of Endo et al (USPN 4446399; "Endo").**

12. Regarding claim 5, Fujita discloses *supra* all of the limitations which are common to claims 1 and 2.

13. Fujita is silent to the first electrodes which are extended in the x direction and are arranged in parallel in the y direction and second electrodes which are extended in the y direction and are arranged in parallel in the x direction.

14. However, this is a well-known modification, as evidenced by Endo. One would arrive at this configuration to allow for a display device having multiple pixels which can display more patterns.

15. Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Fujita, with the first and second electrode arranged in the recited matrix configuration to allow for a more modular display.

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16. **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita in view of Endo in further view of previously cited Rogers (USPN 5821692; "Rogers").**

17. Fujita and Endo are silent to the first electrodes being formed such that one end thereof are extended and reach the outside of the housing and the second electrodes are formed such that one ends thereof are extended and reach the outside of the housing.

18. However, Rogers teaches this configuration allows for easily electrifying the electrodes.⁴

19. Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Fujita and Endo with the recited first and second electrode configuration to allow for easy electrifying.

Response to Arguments

20. Applicant's arguments filed 01/05/2004 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (571) 272-2375.

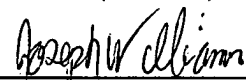
The examiner can normally be reached on 8:30 - 5:00, M-F.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571) 272-2475. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

⁴ Rogers, col. 2, line 65 to col. 3, line 6.

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23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'JW', with a small 'pgm' written below it.A handwritten signature in black ink, appearing to be 'Joseph Williams', written above a rectangular box.

Joseph Williams Primary Examiner AU 2879
